

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 3 of 14

**IN THE CLAIMS:**

Please substitute the following claims for the previous claims:

1. (Currently Amended) A ~~plasma-resistant~~ substrate processing chamber component capable of being exposed to a plasma in a process chamber, the component comprising:

- (a) a substrate processing chamber component structure; and
- (b) an electroplated coating on the substrate processing chamber component structure, the electroplated coating comprising yttrium-containing species.

2. (Original) A component according to claim 1 wherein the yttrium-containing species comprises one or more of elemental yttrium and yttrium oxide.

3. (Original) A component according to claim 1 wherein the yttrium-containing species comprises yttrium oxide, and wherein the electroplated coating further comprises aluminum oxide or zirconium oxide.

4. (Currently Amended) A component according to claim 3 wherein the electroplated coating comprises a compound comprising ~~a stoichiometric ratio of~~ yttrium oxide and aluminum oxide.

5. (Original) A component according to claim 3 wherein the electroplated coating comprises partially stabilized zirconium oxide.

6. (Original) A component according to claim 1 wherein the electroplated coating comprises a thickness having a gradually changing concentration of the yttrium-containing species therethrough.

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 4 of 14

7. (Currently Amended) A ~~process~~ substrate processing chamber comprising:

- (a) a wall around a process zone;
- (b) a substrate support in the process zone;
- (c) a ring about the substrate;
- (d) a gas distributor;
- (e) a gas energizer; and
- (f) a gas exhaust port,

wherein at least one of the wall, substrate support, ring, or gas distributor, comprises a ~~plasma-resistant~~ component capable of being exposed to a plasma in a process chamber, the component comprising a structure having an electroplated coating comprising yttrium-containing species; and

whereby a substrate transported into the process chamber can be processed by a gas released by the gas distributor ~~supply~~, energized by the gas energizer, and exhausted by the gas exhaust port.

8. (Currently Amended) A ~~component~~ chamber according to claim 7 wherein the yttrium-containing species comprises one or more of elemental yttrium and yttrium oxide.

9. (Currently Amended) A ~~component~~ chamber according to claim 7 wherein the yttrium-containing species comprises yttrium oxide, and wherein the electroplated coating further comprises aluminum oxide or zirconium oxide.

10. (Currently Amended) A ~~component~~ chamber according to claim 7 wherein the electroplated coating comprises a compound comprising ~~a stoichiometric ratio of~~ yttrium oxide and aluminum oxide.

11. (Currently Amended) A ~~component~~ chamber according to claim 7 wherein the electroplated coating comprises partially stabilized zirconium oxide.

003330 P01 USA/ETCH/METAL/PJS  
Application No: 10/824,123  
Page 5 of 14

12. (Currently Amended) A ~~component~~ chamber according to claim 7 wherein the electroplated coating comprises a thickness having a gradually changing concentration of the yttrium-containing species therethrough.

13 – 22. (Cancelled)

23. (New) A component according to claim 1 wherein the electroplated coating comprises a thickness having a concentration gradient of yttrium therethrough.

24. (New) A component according to claim 1 wherein the electroplated coating comprises a thickness having a concentration gradient of aluminum therethrough.

25. (New) A component according to claim 1 wherein the electroplated coating is fabricated by annealing a first electroplated layer comprising aluminum or zirconium, and a second electroplated layer comprising yttrium.

26. (New) A component according to claim 25 comprising annealing the layers to form oxidized species.

27. (New) A component according to claim 1 wherein the electroplated coating is fabricated by electroplating a layer comprising a mixture of (i) yttrium and (ii) aluminum or zirconium onto the surface, and annealing the layer.